

## WHAT IS CLAIMED IS:

1           1.    A method for providing a uniform oxide layer over a  
2 metal layer in a semiconductor device, said method comprising the  
3 steps of:  
4           placing a layer of boron doped oxide over said metal layer;  
5           placing a layer of phosphorus doped oxide over said layer of  
6 boron doped oxide;  
7           calculating a time period required for a wet etch process to  
8 etch through said layer of phosphorus doped oxide; and  
9           performing said wet etch process on said phosphorus doped  
10 oxide layer for said time period.

1           2.    The method as set forth in Claim 1 wherein said metal  
2 layer in said semiconductor device is a metal link layer of a  
3 laser trimmed fuse.

1           3.    The method as set forth in Claim 1 wherein said step of  
2 placing said layer of boron doped oxide over said metal layer  
3 comprises the step of:  
4           forming said boron doped oxide layer with a desired  
5 thickness.

1           4.    The method as set forth in Claim 3 wherein said desired  
2 thickness of said boron doped oxide layer is approximately five  
3 thousand Angstroms.

1           5.    The method as set forth in Claim 1 wherein said step of  
2   calculating said time period required for said wet etch process  
3   to etch through said layer of phosphorus doped oxide comprises  
4   the step of:

5           dividing a thickness of said phosphorus doped oxide layer by  
6   a value of an etch rate of said wet etch process through said  
7   phosphorus doped oxide layer.

1           6.    The method as set forth in Claim 1 wherein said step of  
2   placing said layer of phosphorus doped oxide over said layer of  
3   boron doped oxide comprises the step of:

4           forming said phosphorus doped oxide layer with a desired  
5   thickness.

1           7.    The method as set forth in Claim 6 wherein said desired  
2   thickness of said phosphorus doped oxide layer is approximately  
3   five thousand Angstroms.

1        8.    The method as set forth in Claim 1 further comprising  
2    the step of:

3        performing said wet etch process on said boron doped oxide  
4    layer after said wet etch process has etched through said  
5    phosphorus doped oxide layer; and

6        stopping said wet etch process after said wet etch process  
7    has begun to etch said boron doped oxide layer.

1        9.    The method as set forth in claim 1 further comprising  
2    the steps of:

3        calculating a length of time required for said wet etch  
4    process to etch down to a desired thickness of said layer of  
5    boron doped oxide; and

6        performing said wet etch process on said boron doped oxide  
7    layer for said length of time after said wet etch process has  
8    etched through said phosphorus doped oxide layer.

1        10.   The method as set forth in Claim 9 wherein said desired  
2    thickness of said boron doped oxide layer is approximately five  
3    thousand Ångstroms.

1        11. An apparatus for providing a uniform oxide layer over a  
2 metal layer in a semiconductor device, said apparatus comprising:  
3        a semiconductor device comprising a metal layer;  
4        a layer of boron doped oxide placed over said metal layer;  
5 and  
6        a layer of phosphorus doped oxide placed over said layer of  
7 boron doped oxide.

1        12. The apparatus as set forth in Claim 11 wherein said  
2 metal layer in said semiconductor device is a metal link layer of  
3 a laser trimmed fuse.

1        13. The apparatus as set forth in Claim 11 wherein said  
2 layer of boron doped oxide is formed having a desired thickness.

1        14. The apparatus as set forth in Claim 13 wherein said  
2 desired thickness of said boron doped oxide is approximately five  
3 thousand Angstroms.

1        15. The apparatus as set forth in Claim 11, wherein said  
2 layer of phosphorus doped oxide placed over said layer of  
3 phosphorus doped oxide is etched through down to said layer of  
4 boron doped oxide.

1        16. The apparatus as set forth in Claim 11 wherein said  
2 layer of phosphorus doped oxide is formed having a desired  
3 thickness.

1        17. The apparatus as set forth in Claim 16 wherein said  
2 desired thickness of said phosphorus doped oxide is approximately  
3 five thousand Angstroms.

1        18. An apparatus for providing a uniform oxide layer over a  
2 metal layer in a semiconductor device, said apparatus comprising:  
3        a semiconductor device comprising a metal layer;  
4        a layer of a first doped oxide placed over said metal layer  
5 wherein said layer of said first doped oxide has a slow etch  
6 rate; and  
7        a layer of a second doped oxide placed over said layer of  
8 said first doped oxide wherein said layer of said second doped  
9 oxide has a fast etch rate.

1        19. The apparatus as set forth in Claim 18 wherein said  
2 layer of said second doped oxide placed over said layer of said  
3 first doped oxide is etched through down to said layer of said  
4 first doped oxide.

1        20. The apparatus as set forth in Claim 19 wherein a  
2 thickness of said layer of said first doped oxide is  
3 approximately five thousand Angstroms.

1        21. A method for providing a uniform oxide layer over a  
2 metal layer in a semiconductor device, said method comprising the  
3 steps of:

4        placing a layer of a first doped oxide over said metal layer  
5 wherein said first doped oxide has a slow etch rate;

6        placing a layer of a second doped oxide over said layer of  
7 said first doped oxide wherein said second doped oxide has a fast  
8 etch rate;

9        calculating a time period required for a wet etch process to  
10 etch through said layer of said second doped oxide; and

11       performing said wet etch process on said layer of said  
12 second doped oxide for said time period.

1        22. The method as set forth in Claim 21 wherein said metal  
2 layer in said semiconductor device is a metal link layer of a  
3 laser trimmed fuse.

1        23. The method as set forth in Claim 21 wherein said step  
2 of placing said layer of said first doped oxide over said metal  
3 layer comprises the step of:

4        forming said layer of said first doped oxide with a desired  
5 thickness.

1        24. The method as set forth in Claim 23 wherein said  
2 desired thickness of said layer of said first doped oxide is  
3 approximately five thousand Angstroms.

1        25. The method as set forth in Claim 21 wherein said step  
2 of calculating said time period required for said wet etch  
3 process to etch through said layer of said second doped oxide  
4 comprises the step of:

5        dividing a thickness of said layer of said second doped  
6 oxide by a value of an etch rate of said wet etch process through  
7 said second doped oxide layer.